

THE CENTER LINE

MONTANA HIGHWAY COMMISSION

Vol. V., No. 6

July, 1962

SECONDARY ROADS ENGINEER RETIRES



L. Walker Brown is retiring from the Montana State Highway Department, effective Tuesday, July 31, Fred Quinnell, Jr., State Highway Engineer announced today.

Brown has been secondary roads engineer since 1955.

He attended Washington State College from 1919 to 1922 as

a civil engineering student. Becoming interested in Forestry, he spent the next three years at Montana State University studying that subject.

In 1928 Brown went to work for the Montana Highway Department as a project engineer out of Missoula, and held that position for 14 years until the war broke out. He then went into service for his country, working on wartime contracts, including an ammunition dump in South Dakota, the Great Falls Air Base, and in Alaska.

In 1945, he helped build the N. P. tunnel on Bozeman Pass between Bozeman and Livingston, after which he worked for the Soil Conservation Service.

He returned to the Montana Highway Department in 1947 as a Project Engineer, was made division engineer in Billings in 1950, transferred to Helena as special assignments engineer in 1954, and the following year was made secondary roads engineer, his present position.

Walker and his wife have a daughter Winifred, who is married to Neil Keefer of Billings.

Fred Wells, Division engineer at Kalispell will replace Brown as Secondary Roads Engineer.

MAKE SAFETY A HABIT

SAFETY is an important part of any job or endeavor from the planning stage to completion. It is not to be isolated as a special subject or activity, but should be included as an integral part of any project.

Since the beginning of time, people have been exposed to danger with considerable increase developing in this, the machine age. Hazards are everywhere—highway, sea, air, forests. People are exposed to them whether at work, home or play. We must face the fact that life can be seriously affected by these hazards and learn the prevention methods related to every activity we perform.

Despite all hazards, however, unsafe acts by persons are responsible for the greater majority of accidents. It is apparent that efforts to encourage safe habits must not be relaxed.

It would seem that the suffering of an injury would make a person concentrate upon hazards and have more regard for the result of carelessness. However, there are many accident repeaters.

A ceaseless campaign is necessary in the development of safety. This is evident from the experience of industry where thousands of lives have been spared by insistence on safety.

Safety engineering, as related to machines, equipment, lay-out and construction, is an absolute necessity. But it is by no means the complete answer. Thoroughly training the new worker and continuously reminding the older worker are also necessary so that the individual will not become apathetic to the hazards and allow himself to get careless.

Safety must be practiced all the time. It is the responsibility of the foreman or gang leader to insist that safe habits are developed.

Safety is habitual with safe workers. . .

AWARD SHEET Project No.	Amount of Bid	Bidder	Letting June 20, 1962 Address
I 15-1(15)37 Armstead No. & So. (Sign) Beaverhead County	\$ 20,604.58	Electrical Prod. Corp.	Portland, Ore.
I 90-6(6)309 Rocky Canyon (Sign) Gallatin County	\$ 20,838.81	Electrical Products Corp.	Portland, Ore.
I 90-7(10)327 Livingston So. & E. (Sign) Park County	\$ 68,540.90	National Advertising Co.	Bedford Park ,Ill.
I 94-1(6)50U1 I 94-2(4)51U1 Custer-Easterly & Big Horn East & West (Road) Yellowstone & Treasure County	\$1,034,576.96	Stanley H. Arkwright, Inc.,	Billings, Mont.
I 94-2(4)51U2 Big Horn-E. & W. Bridge Treasure County	\$ 53,881.70	Schultz & Lindsay Const. Co.	Fargo, N. Dak.
I 94-1(6)50U2 I 94-2(4)51U3 Custer-Easterly & Big Horn East & West (Fence) Yellowstone & Treasure Co's.	\$ 35,843.50	Bohleen Const. Co.	Wilsall, Mont.
I 94-3(7)114 I 94-4(10)127 I 94-4(12)119 Hathaway-East & West Hathaway East & Miles City E. and W. (Sign) Rosebud & Custer Co's.	\$ 74,736.69	Electrical Products Corp.	Portland, Ore.
S 68(5)U1 Hilger-Winifred-Big Sandy (Road) Fergus County	\$ 327,341.54	Gus M. Albert, Cont.	Miles City, Mont.
S 377(2) Whitefish-No. (Road) Flathead County	\$ 455,814.70	Murphy Bros.	Spokane, Wash.
SMP 1101-62 Office Bldg., Glendive Dawson County	\$ 25,991.00	Morgen & Oswood Const. Co.	Glasgow, Mont.
SMP 2101-62 Pipe Line, Havre Hill County	\$ 12,292.90	Nault Plmb. & Heating	Havre, Mont.
SMP 3210-03-62 Shop Bldg. W. of Lolo Missoula County	\$ 17,720.00	Watters Const. Co., Inc.	Helena, Mont.
SMP 3210-62 Section House W. of Lolo Missoula County	\$ 17,860.00	Tollef Follinglo	Missoula, Mont.
AWARD SHEET Project No.	Amount of Bid	Bidder	Letting June 27, 1962 Address
F 62(11) Shelby-Chester (Road) Toole & Liberty Co's.	\$ 195,029.30	United Paving Co., Inc.	Spokane, Wash.
F 213(4) Yellowstone River Bridge Glendive (Br. Repair) Dawson County	\$ 117,500.00	N. A. Nelson Const. Co.	Sheridan, Wyo.
S 77(6) Cascade-Ulm Loop (Br. & Approaches) Cascade County	\$ 84,652.20	Watters Const. Co., Inc.	Helena, Mont.
S 188(4) Galata-North (Road) Toole County	\$ 246,315.18	O'Neil Const. Co.	Havre, Mont.
S 402(3) North of Culbertson- McCabe-Bainville (Road) Roosevelt County	\$ 294,423.63	Hilling Constr. Co., Inc.	Williston, N. Dak.
SMP 0999-62 Various (Crsh. & Stk'pile) Custer Rosebud & Fallon Co's.	\$ 95,102.85	Schultz & Lindsay Const. Co.	Fargo, N. Dak.
Total for Month—\$ 3,119,066.44			
Total for Year—\$19,040,291.03			

"GROWING UP"

Training-in-Service Department

In our present society, as any organization continues to grow, it will be compelled, for efficiency of operation, to continue to decentralize.

Organizational growth usually becomes more apparent at front line supervisory level. It is here that the prime objectives of the organization are accomplished. Size and geographical dispersion necessitates pushing more authority and responsibility, often gradually, down to supervisors in the lower and middle management echelons.

Along with this growth, and due partly to the accelerated rate of specialization, administrators find it increasingly difficult to fill an ever-larger

number of jobs in the middle and upper management levels from the ranks of front line supervisors.

To fill this demand most of the development work must be done at home. Pirating or recruiting other organizations' proven managers, experience has shown, is a costly and inefficient way of getting the managers you really want.

Men do not usually reach "Upper Level Management" ranks until they have passed 40 to 45 years of age. Unfortunately for many of us, as we reach this age group, imagination, physical drive and mental flexibility lessen and we must be helped to cast off the mental shackles that prevent further growth.

Some of the areas where help is needed and which make filling higher management jobs from within an increasingly difficult task are:

1) *A promising employee*, on growing up, may become disqualified for "Upper Management" because: His vision of what the organization is trying to do or the prime objectives have been narrowed to a worms'-eye view of his own specialty.

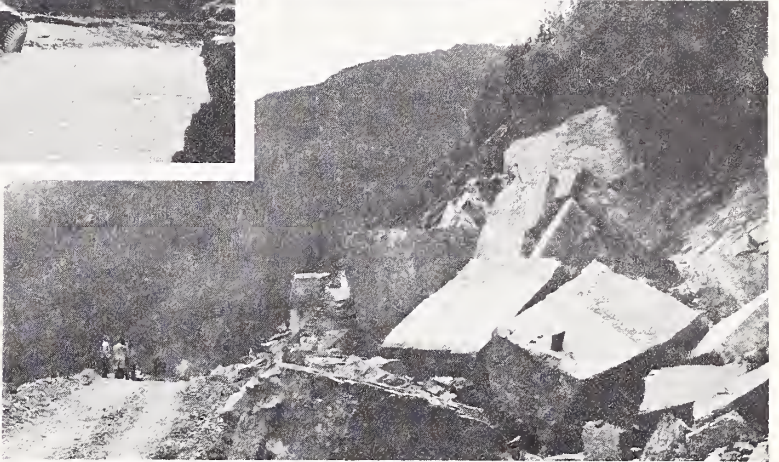
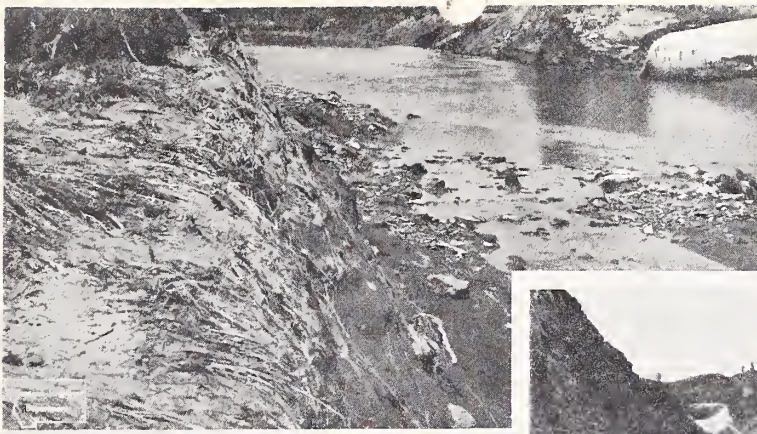
2) *A promising employee*, on growing up, may become disqualified for "Upper Management" because: He may become set in a rut to the extent that he looks with disfavor on bright ideas or progressive suggestions from subordinates and continually searches for reasons why new ideas and suggestions won't work.

3) *A promising employee*, on growing up may become disqualified for "Upper Management" because: His advancements are no longer based on his ability as a technician, specialist or engineer and he is not able to show others how to do things, make them want to do these things, do them well and be able to hold them accountable.

4) *A promising employee*, on growing up, may become disqualified for "Upper Management" because: He may not be able to effectively control the efforts of many individuals, through proper planning, assigning and directing of work and seeing that the team produces efficiently and economically.

5) *A promising employee*, on growing up, may become disqualified for "Upper Management" because: He may not have learned enough about

(Continued on page 4)



Upper Left—the gaping gap in Montana 19 where Armells Creek in northern Fergus County formerly was confined to two large tubes. Upper Right—the section of Montana 20, that sunk from 20 to 25 feet. Lower Left—an aerial view showing the relation of the highway to the old stream. Lower Right—the slide along U. S. 2 south of Glacier Park. Center—the results of the great force that Armells Creek must have had to take this large pipe out and crumple it like a straw. A new bridge will replace the tubes.

CAN'T BEAT OLD MOTHER NATURE

Scientists and engineers have studied and tried for centuries to harness and corral the forces of Mother Nature, and have made great progress in many fields in this great endeavor. Once in a while, however, the old gal rebels, and kicks back at man, just to show him that she isn't completely at his mercy, yet.

The spring, and so far, the summer of 1962, has proven that when the elements wish to, they can deal men some cruel blows. An abnormally high rainfall during the last three months, and continuing into July, has been a boon to the farmers and stockmen, but to the roadbuilding engineer, and contractor, it has been miserable. Dirt cannot be compacted to the desired degree when too much moisture is present, and nothing at all can be done when the dirt fill is a sea of mud. Dirt grades that get wet are similar to a hayfield that gets wet. The dirt must be spread or windrowed to dry before it can be covered. The unusually heavy rains have done considerable damage to shoulders and many miles of shoulder that was completed now must be built up again.

Not only on construction, has the damage been heavy, but for recently installed Maintenance Engineer Tom Ratchford, the spring and summer has been one that will live long in his memory. He had no sooner taken over after Bill Bawden's death, when a slide of gigantic proportions was triggered along U. S. Highway No. 2 along Glacier Park. His forces had not had the road open many days, when one of the cloudbursts that hit Fergus County this season, dropped inches of rain in the Armells Creek drainage. Two huge culverts that carried the creek under Montana 19, just south of the Robinson Bridge quickly gave up, and decided to move out under the tremendous pressure, taking along a sizeable portion of the roadway with them. It was several days before the water subsided, and a detour could be built.

Shortly after that, a section of Montana 20, between Lincoln and Ovando began to sink out of sight. From the aerial photo, it appears that possibly, a portion of the old stream bed could still be buried under the roadway, and the sub-base gave way. The photos of the three problems that have faced Maintenance Engineer Tom Ratchford, give a good idea of how destructive the forces of nature are, once they are unleashed.

INSTANT BOOKKEEPING ADOPTED

Montana became the third state in the nation to adopt a concurrent audit system. Officials of the Department and of the Bureau of Public Roads signed an agreement adopting this system in Mr. Quinnell's office on July 9th.

The system actually went into effect at the start of the new fiscal year, and will greatly speed up the payment of vouchers from the BPR. Much hand prepared work will be eliminated, because the system will be tied to the data computer. The Bureau will no longer find it necessary to make the hitherto tedious examinations of the original cost documents. With the construction program expanding as it has the past few years, considerable funds were at times tied up in reimbursable items, and at the same time, payments to contractors have also increased proportionately. The new system should greatly facilitate the work of the Bureau Auditors and our own accounting section so that reimbursable funds can be obtained with greater speed and accuracy.



This picture shows officials of the Bureau of Public Roads and the Montana Highway Department signing the Concurrent Audit Agreement. Sitting, l. to r., Robert O'Leary, Chief Accountant of the Montana Highway Department; E. H. Cowan, Division Engineer of the BPR; Fred Quinnell, Jr., State Highway Engineer, and Ivan Gillson, Assistant Executive Officer of the BPR's Regional Office in Portland. Standing, l. to r., Doug Davis, Administrative Manager of the Montana Division Office of the BPR; Al Griener, Administrative Engineer and Don DeVore, Technical Engineer, both of the Montana Highway Department.

TRAINING-IN-SERVICE

(Continued from page 2)

the general functions of the organization. It is not desirable that he become expert in all phases, but he does need to learn sufficiently to be able to gain understanding and confidence of other managers in his decision.

6) *A promising employee*, on growing up, may become disqualified for "*Upper Management*" because: He may not have gained sufficient understanding of the community in which the organization operates and of the economic, political and social forces with which the organization must deal.

7) *A promising employee*, on growing up, may become disqualified for "*Upper Management*" because: He may not have had the training or have developed the ability necessary to resist the increasing demand for order which puts a premium on conformity and causes associates to frown on the individual who "sticks out his neck."

8) Finally, *a promising employee* on growing up, may become disqualified for "*Upper Management*," because: He may have failed to train an understudy in the preceeding qualifications and thus has no replacement when he becomes eligible for advancement.

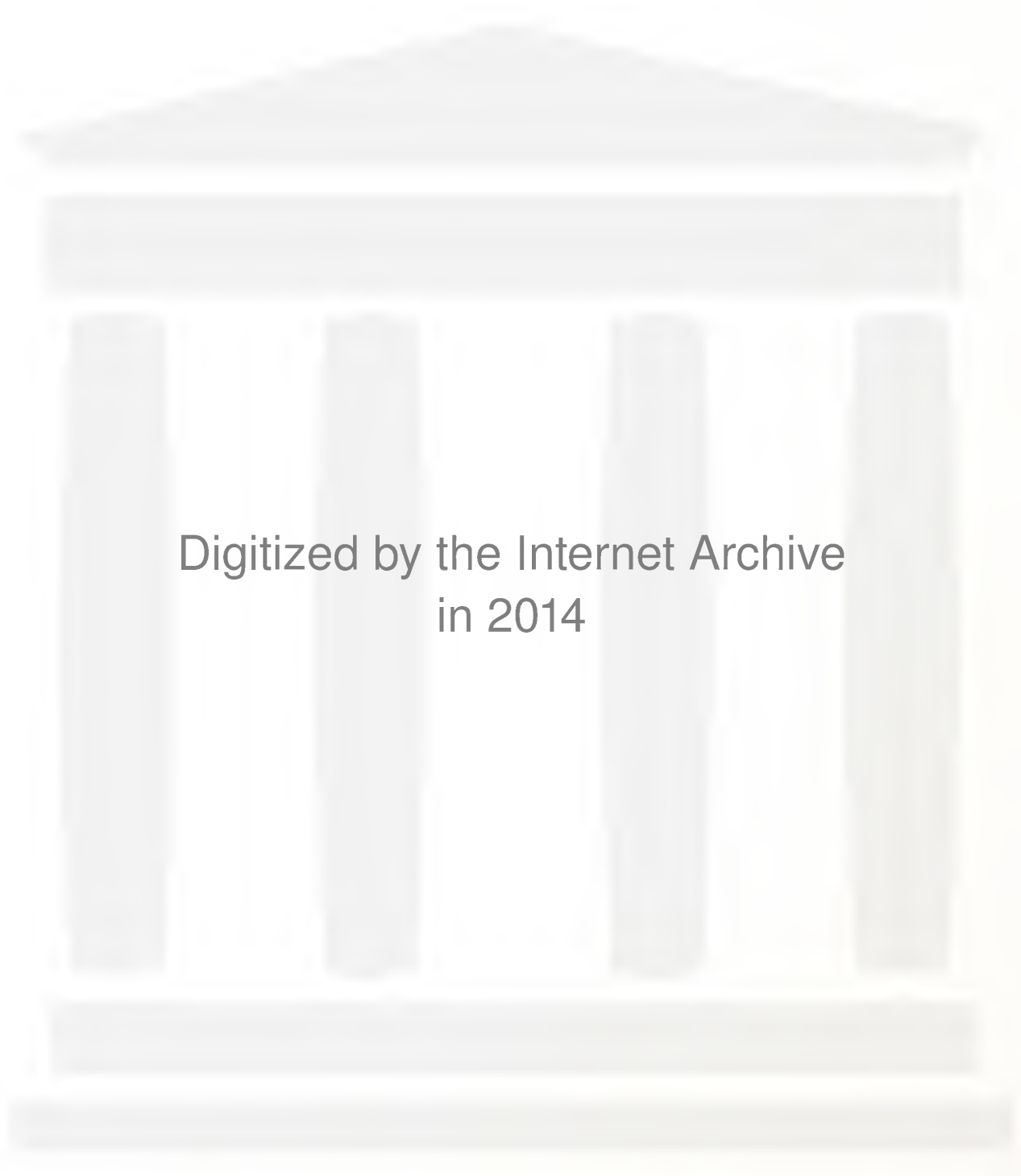
SUCH IS THE PRICE OF PROGRESS

This bit of news, with the donor desiring to remain anonymous, was contributed in the hope that perhaps it would explain some of the difficulty that our Right-of-Way Negotiators are having obtaining land for the Interstate.

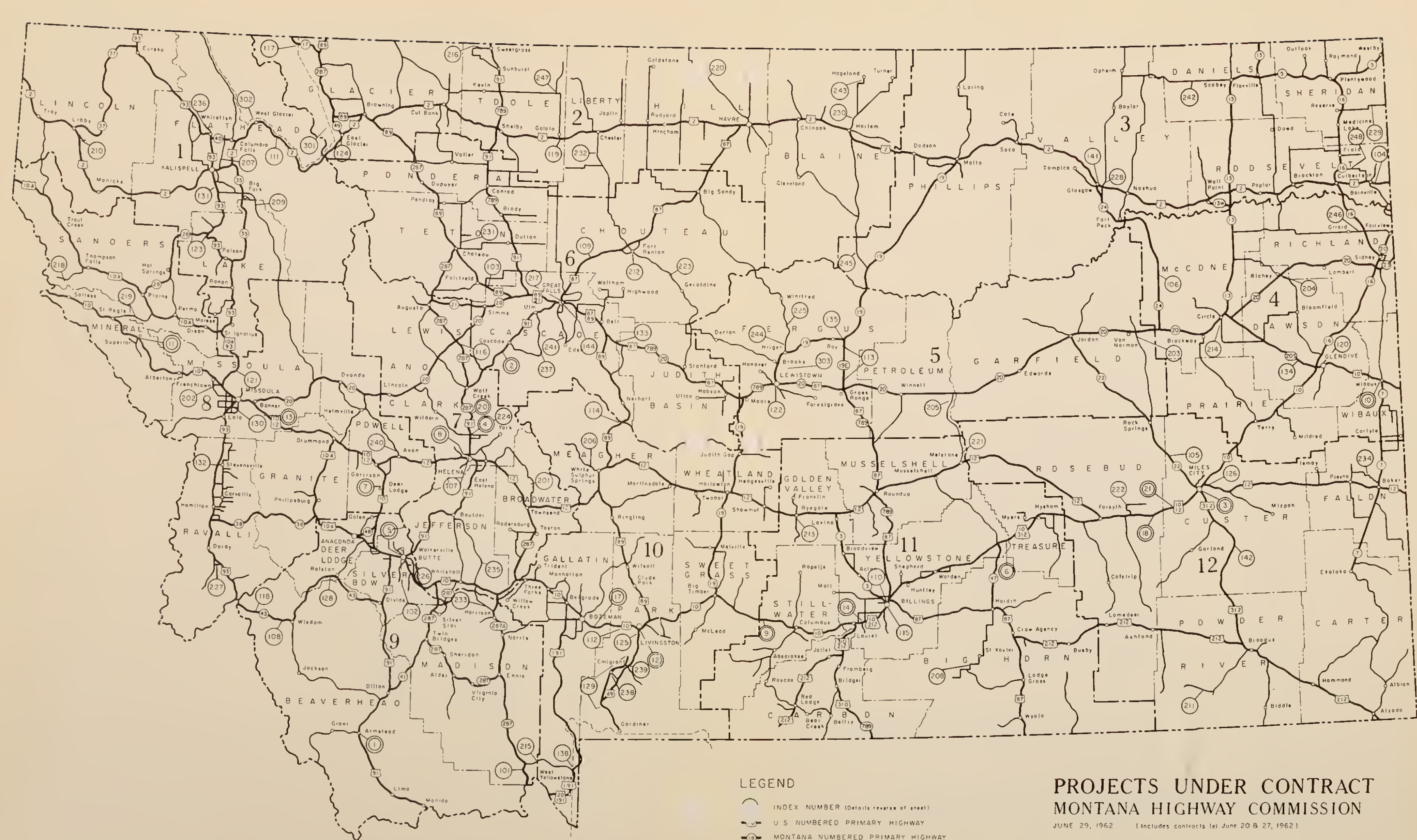
Standing up for your rights can sometimes be carried too far. For instance, take the case of the farmer whose land was about to be condemned by the State Highway Commission for the new turnpike. He fussed and fumed and created so much Hell generally that the legislature decided to build around him. He's still got his farm, but now every time he wants to go to the john, he's got to drive fourteen miles and pay a two-dollar toll.

114	FHP 32 - 1 (1) *	1962	26.9 miles plant mix bituminous surfacing. (U. S. 89 - South of Nehart).
115	U - PG 228 (16)	11-30-63	1.5 miles grading, drainage, cement stabilized base, aggregate surfacing, concrete pavement, plant mix bituminous and seal coat oiling. One concrete underpass - N.P. RR. (U. S. 10 - In Billings).
116	F - 238 (8) U 1	6-15-63	8.5 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Montana 287 - North of Wolf Creek).
117	F - 238 (8) U 2	10-31-62	One 294 foot riveted plate girder bridge - Dearborn River. (Montana 287 - North of Wolf Creek).
118	NP 444 & 14 A *	1962	10.9 miles grading, drainage, surfacing and bituminous surface treatment. (Montana 17 - Northwest of East Glacier).
119	FHP 20 - B *	1962	9.4 miles grading, drainage, and four 60 foot concrete slab bridges. Three over Trail Creek and one over Ruby Creek. (Montana 43 - West of Wisdom).
120	F - 62 (11)	10-31-62	8.2 miles plant mix bituminous surfacing. (U. S. 2 - East of Galata).
121	F - 213 (4)	12-31-62	Repair three ice damaged piers of bridge - Yellowstone River. (U. S. 10 - In Glendive).
122	F - PG 219 (16) U 2	10-31-62	One 173 foot prestressed concrete beam overpass - N.P. RR. (U. S. 10 A - Northwest of Missoula).
123	U - 112 (3) U 229 (15) & U - 235 (3)	10-30-62	2.0 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 30 foot concrete slab bridge - Big Spring Creek (Montana 20 - Lewistown Main Street).
124	F - 191 (20) U 1	8-15-62	7.3 miles (2.5 miles grading and drainage) aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 93 - North of Folsom).
125	F - 260 (7) & F 253 (8)	8-15-63	5.8 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 2 - West to East of East Glacier).
126	F - 13 (6) U 2	9-30-62	4.0 miles seal and cover oiling. (U. S. 89 - Livingston South).
127	F - 86 (20) U 1	9-15-62	0.8 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 12 - East of Miles City).
128	F - 43 (15) U 2	9-30-62	31.4 miles seal and cover oiling. (Montana 43 - West to East of Ralston).
129	F - 217 (12) U 2 & F 217 (13) U 2	9-30-62	24.0 miles seal and cover oiling. (U. S. 89 - South to North of Emigrant).
130	F - PG 215 (7)	6-30-63	0.3 miles four lane divided, grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 972 foot steel and concrete bridge - C.M.S.T.&P RR and Clark Fork. (U. S. 93 - In Missoula).
131	F - 191 (19) U 1	9-1-63	5.5 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 93 - South of Kalispell).
132	F - 191 (21) U 2	9-1-62	7.2 miles seal and cover oiling. (U. S. 93 - South of Kalispell).
133	F - 259 (9) U 2	9-1-62	14.5 miles seal and cover oiling. (U. S. 93 - North of Hamilton).
134	F - 235 (27) U 2	9-1-62	5.1 miles seal and cover oiling. (U. S. 87 - Southeast of Belt).
135	F - 246 (9) U 2	9-1-62	9.2 miles seal and cover oiling. (Montana 20 S - West of Glendive).
136	F - 103 (10) U 1 & F 333 (28) U 1	8-15-62	11.5 miles grading, cement stabilized base, surfacing, drainage, plant mix bituminous and seal coat oiling. Widen 57 & 75 foot treated timber bridges to 36 foot width - Box Elder Creek. (Montana 19 - Roy Northeast).
137	FHP - 42 M *	1962	2.2 miles grading, drainage, aggregate surfacing, and bituminous surface treatment. Widening of 105 foot Reinforced Concrete Girder Bridge - Grayling Creek. (U. S. 191 - North of West Yellowstone).
138	F - 144 (6) U 1	8-15-62	4.7 miles (2.3 miles four lane divided) grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 38 foot treated timber bridge - Goudge Coulee. (U. S. 2 - Glasgow East).
139	F - 144 (6) U 2	8-15-62	Installation of traffic signals and lighting. (U. S. 2 - First Avenue North in Glasgow).
140	F - 156 (10) U 1 & F 156 (11) U 1	9-15-62	13.2 miles grading, drainage, surfacing, plant mix bituminous surfacing. (U. S. 212 - Southeast of Miles City).
141	F - 180 (4) & U 277 (5)	8-15-62	3.2 miles minor grading, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 87 & 89 - In Great Falls).
142	F - 180 (5)	10-15-62	1.1 miles (four lane divided) median concrete curbing - Second Avenue North. (U. S. 89 - Great Falls East).
FEDERAL AID SECONDARY PROJECTS			
201	S - 6 (4)	8-31-62	7.0 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (North of Townsend).
202	S - SG - 272 (2)	8-15-62	1.7 miles aggregate surfacing, plant mix bituminous and seal coat oiling. (Southeast of Frenchtown).
203	S - 258 (4)	11-12-62	7.8 miles grading, drainage and aggregate surfacing. (Junction Montana 20 East Van Norman South).
204	S - 32 (11)	11-12-62	7.4 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling. (Richey Northwest & Southeast).
205	S - 399 (2)	8-15-62	1.0 mile grading, drainage and aggregate surfacing. One 132 foot prestressed concrete beam bridge - Flatwillow Creek. (North of Melstone).
206	S - 49 (7) U 1	9-1-62	9.0 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 29 foot - treated timber bridge - North Fork Smith River. (White Sulphur Springs Northwest).
207	S - 7 (6) U 1	8-15-62	6.5 miles (1.9 miles four lane divided) grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (East of Kalispell).
208	FLH - 9 (1) U 1	9-1-62	5.2 miles grading, drainage, plant mix bituminous and seal coat oiling. (St. Xavier Southwest).
209	FLH - 9 (1) U 2	9-1-62	4.4 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (St. Xavier Southwest).
210	FLH - 9 (1) U 3	9-15-62	One 65 foot prestressed concrete beam bridge - Big Horn Irrigation Canal. (St. Xavier Southwest).
211	S - 65 (4) U 2	9-1-62	4.9 miles seal and cover oiling. (Southeast of Big Fork).
212	S - 325 (1) U 2	8-31-62	One 122 foot prestressed concrete beam bridge - Libby Creek. (Southeast of Libby).
213	S - 333 (2)	8-15-62	5.3 miles grading, drainage, aggregate surfacing. (Southwest of Broadue).
214	S - 290 (12)	7-31-63	1.7 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 708 foot riveted plate girder bridge - Missouri River. (Fort Benton Southeast).
215	S - 71 (4)	8-31-62	0.5 miles grading, drainage, and aggregate surfacing. One 142 foot prestressed concrete beam bridge - Musselshell River. (Ryegate South).
216	S - 238 (1) U 1	9-15-62	6.6 miles grading, drainage and aggregate surfacing. (Circle South).
217	S - 238 (1) U 2	10-31-62	Three bridges, One 193 foot prestressed concrete beam - Redwater River, two 38 foot treated timber trestles - Hell and McOne Creeks. (Circle South).
218	ERFO - 40 (1) *	1962	3.8 miles grading. (Through Earthquake Slide - Southeast of Ennis).
219	S - 366 (6)	12-15-62	4.1 miles grading, drainage and aggregate surfacing. (Sweetgrass West).
220	S - US 386 (1)	10-15-62	2.6 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Northeast of Great Falls).
221	S - 221 (2)	11-1-62	5.2 miles grading, drainage and aggregate surfacing. (Thompson Falls Southwest).
222	FHP 9 - 1 (1) *	1962	1.5 miles grading, drainage, and selected topping. One 445 foot reinforced concrete girder bridge - Clark Fork. (East of St. Regis).
223	S - 301 (8)	10-15-62	5.0 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Northeast of Havre).
224	S - 399 (1)	9-1-62	7.9 miles grading, drainage and aggregate surfacing. (Melstone North).
225	S - 259 (2) U 1	11-1-62	9.0 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 38 foot treated timber trestle bridge - Sand Creek. (Northeast of Forsyth).
226	S - 290 (13) U 1	11-15-62	9.5 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Northwest of Geraldine).
227	S - 2 (15) U 1	10-30-63	1.8 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (North of Helena).
228	S - 68 (5) U 1	11-30-62	13.0 miles aggregate surfacing, plant mix bituminous and seal coat oiling. (North of Hilger).
229	S - 213 (4)	8-30-63	0.9 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (East of Butte).
230	S - 328 (1)	8-15-62	1.2 miles grading, drainage, aggregate surfacing, road mix bituminous and seal coat oiling. Two prestressed concrete beam bridges. One 173 foot - West Fork Bitterroot River, One 198 foot - East Fork Bitterroot River. (South of Darby).
231	S - 368 (13)	8-15-62	0.6 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Junction U. S. 2 - East of Glasgow - North).
232	S - 239 (2) U 1	10-30-62	13.4 miles aggregate surfacing, plant mix bituminous and seal coat oiling. (Junction U. S. 2 - East of Glasgow North).
233	S - 368 (14)	8-15-62	1.4 miles aggregate surfacing, plant mix bituminous and seal coat oiling. (Junction U. S. 2 - East of Glasgow - South).
234	S - 73 (4)	10-15-62	8.4 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling. (East of Reserve).
235	S - 12 (9)	10-15-62	4.9 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Harlem North).
236	S - 82 (1)	10-30-62	5.9 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Northeast of Cboteau).
237	S - 239 (9) U 1	10-30-62	6.5 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (South of Chester).
238	S - 167 (6)	8-15-62	5.0 miles grading, drainage, surfacing and bituminous surface treatment. (Northwest of Harrison).
239	S - 398 (2)	9-15-63	9.6 miles grading, drainage and aggregate surfacing. (Northwest of Baker).
240	S - 9 (9) U 2	9-30-62	8.5 miles seal and cover oiling. (Southeast of Boulder).
241	S - 377 (2)	8-15-63	4.0 miles grading, aggregate surfacing, plant mix bituminous and seal coat oiling. (Whitefish North).
242	S - 77 (6)	11-30-62	0.6 miles grading, drainage and one 142 foot prestressed concrete beam bridge. - Smith River. (South of Ulm).
243	S - 66 (2) U 2	9-30-62	1.2 miles seal and cover oiling. (Emigrant Southeast).
244	S - 273 (3) U 2	9-30-62	0.8 miles seal and cover oiling. (Emigrant North).
245	S - 291 (6)	8-30-62	5.4 miles grading, cement stabilized base - drainage, plant mix bituminous and seal coat oiling. (Northwest of Avon).
246	S - 329 (4) U 2	9-1-62	10.3 miles seal and cover oiling. (North of Eden).
247	S - 8 (10) U 2	9-1-62	9.0 miles seal and cover oiling. (West of Scooby).
248	S - 179 (4)	8-15-62	6.3 miles grading, drainage and aggregate surfacing. (Hogeland West).
249	S - 68 (4) U 2	9-1-62	10.5 miles seal and cover oiling. (Hilger North).
250	S - 187 (8) U 2	9-1-62	10.6 miles seal and cover oiling. (South of Harlem).
251	S - 361 (10) U 2	9-1-62	5.5 miles seal and cover oiling. (Girard East).
252	S - 188 (4)	9-15-63	10.1 miles grading, drainage and aggregate surfacing. (North of Galata).
253	S - 402 (3)	9-15-63	7.8 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Northeast of Culbertson).
OFF SYSTEM PROJECTS			
301	FHP-2-A2, B2, & 12-A2 *	1962	7.2 miles grading and aggregate base. (Two Medicine Road and Approach - Northwest of East Glacier).
302	NP - 8 - A2 *	1962	0.5 miles grading, drainage, surfacing and bituminous surfacing - One 160 foot concrete girder bridge - McDonald Creek, (In Glacier Park - North of West Glacier).
303	R - AD - 7 (1) *	1962	8.7 miles grading, drainage and aggregate surfacing. (Brooks East).

* - - - - - Bureau of Public Roads Projects.



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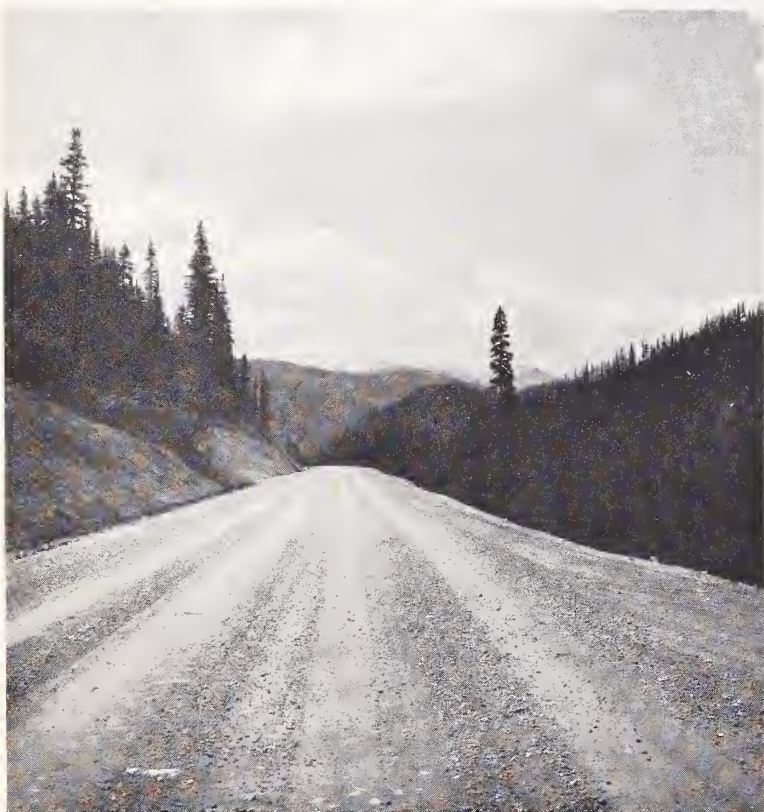
LEGEND

-  INDEX NUMBER (Details reverse of sheet)
-  U.S. NUMBERED PRIMARY HIGHWAY
-  MONTANA NUMBERED PRIMARY HIGHWAY
-  SECONDARY HIGHWAY
-  10 FINANCIAL DISTRICT NUMBER

PROJECTS UNDER CONTRACT
MONTANA HIGHWAY COMMISSION

JUNE 29, 1962 (Includes contracts let June 20 & 27, 1962)

Map Index Number	Project Number	Construction Date	Length, Type of Construction and Location				
<u>FEDERAL AID INTERSTATE PROJECTS</u>							
1	I 15-1 (11) 37 U 1	9-1-62	7.8 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling . (U. S. 91 - South to North of Armistead) .	114	FHP 32 - 1 (1) *	1962	26.9 miles plant mix bituminous surfacing. (U. S. 89 - South of Redhart) .
	I 15-1 (11) 37 U 3	8-15-62	7.8 miles fencing and cattle guards . (U. S. 91 - South to North of Armistead) .	215	U - PG 228 (16)	11-30-63	1.5 miles grading, drainage, cement stabilized base, aggregate surfacing, concrete pavement, plant mix bituminous and seal coat oiling. One concrete underpass - H.P. RR. (U. S. 10 - In Billings) .
2	I 15-1 (15) 37 U 4	10-31-62	7.8 miles signing and delineation . (U. S. 91 - South to North of Armistead) .	116	F - 238 (8) U 1	6-15-63	8.3 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Montana 287 - North of Wolf Creek) .
	I 15-5 (13) 239 U 1	9-1-62	9.7 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling . Same construction on frontage road . (U. S. 91 - South to North of Cascade) .		F - 238 (8) U 2	10-31-62	One 294 foot riveted plate girder bridge - Dearborn River. (Montana 287 - North of Wolf Creek) .
	I 15-5 (13) 239 U 3	9-1-62	9.7 miles fencing . (U. S. 91 - South to North of Cascade) .	11	HP 444 & 44 A *	1962	10.9 miles grading, drainage, surfacing and bituminous surface treatment. (Montana 17 - Northwest of East Glacier) .
3	I 15-5 (17) 239 U 4	12-31-62	9.7 miles signing and delineation . (U. S. 91 - South to North of Cascade) .	1	FHP 20 - E *	1962	9.4 miles grading, drainage, and four 60 foot concrete slab bridges. Three over Trail Creek and one over Ruby Creek. (Montana 43 - West of Weldon) .
	I 94-4 (6) 136 U 1	9-15-62	11.6 miles grading, drainage, aggregate surfacing, Portland Cement paving, plant mix bituminous and seal coat oiling . Three 20 foot and two 10 foot concrete slab junior grade separations. One 168 foot prestressed concrete beam structure - Baker Road Interchange U. S. 12 - (U. S. 10 - Miles City - East) .	119	F - 62 (11)	10-31-62	8.2 miles plant mix bituminous surfacing. (U. S. 2 - East of Galata) .
	I 94-4 (10) 127	11-30-62	11.6 miles fencing . (U. S. 10 - Miles City - East) .	120	F - 213 (4)	12-31-62	Repair three lee damaged piers of bridge - Yellowstone River. (U. S. 10 - In Glendive) .
4	I 15-4 (6) 186 U 3	8-31-62	20.9 miles signing and delineation . (U. S. 10 - west to East of Miles City) .	121	F - PG 219 (16) U 2	10-31-62	One 173 foot prestressed concrete beam overpass - H.P. RR. (U. S. - Northwest of Missoula) .
	I 15-4 (6) 186 U 1	10-30-63	Three prestressed concrete beam structures. Dual 118 foot - County Road Separation . One 205 foot - Lincoln Road Interchange . (U. S. 91 - North of Helena) .	122	U - 112 (3) U 229 (15) & U - 235 (3)	10-30-62	2.0 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 30 foot concrete slab bridge - Big Spring Creek (Montana 20 - Lewistown Main Street) .
	I 15-4 (6) 186 U 2	10-31-62	8.2 miles four lane divided, grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. Frontage Roads. (U. S. 91 - Helena North) . Weigh Station .	123	F - 191 (20) U 1	8-15-62	7.3 miles (2.5 miles grading and drainage) aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 93 - North of Polson) .
	I 15-4 (6) 186 U 4	6-30-63	One 50 foot prestressed concrete beam bridge - Ten Mile Creek . Note structure carries two 38 foot Interstate and one 24 foot Frontage roadways . (U. S. 91 Helena - North) .	124	F - 260 (7) & F 253 (8)	8-15-63	5.8 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 2 - West to East of East Glacier) .
5	I 15-2 (14) 127 U 1	9-1-63	8.2 miles fencing and cattle guards . (U. S. 91 - Helena - North) .	125	F - 13 (6) U 2	9-30-62	4.0 miles seal and cover oiling. (U. S. 89 - Livingston South) .
	I 15-2 (14) 127 U 2	9-1-62	2.7 miles four lane divided, grading, drainage, aggregate surfacing, concrete paving, plant mix bituminous and seal coat oiling . (U. S. 91 - In Butte) .	126	F - 86 (20) U 1	9-15-62	0.8 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 12 - East of Miles City) .
	I 15-2 (14) 127 U 3	8-31-63	2.7 miles fencing . (U. S. 91 - In Butte) .	128	F - 43 (15) U 2	9-30-62	31.4 miles seal and cover oiling. (Montana 43 - West to East of Ralston) .
	I 15-2 (17) 130 U 1	6-30-63	1.5 miles grading, four lane divided, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling . (U. S. 91 - Butte East) .	129	F - 217 (12) U 2 & F 217 (13) U 2	9-30-62	24.0 miles seal and cover oiling. (U. S. 89 - South to North of Emigrant) .
	I 15-2 (17) 130 U 2	6-30-63	Three steel girder bridges, one 266 foot - Upper Nine Mile Separation. Dual 193 foot - East Butte Interchange . (U. S. 91 - Butte East) .	130	F - PG 215 (7)	6-30-63	0.3 miles four lane divided, grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 972 foot steel and concrete bridge - C.M.S.T.&P RR and Clark Fork. (U. S. 93 - In Missoula) .
	I 15-2 (17) 130 U 3	11-30-63	1.5 miles fencing . (U. S. 91 - Butte East) .	131	F - 191 (19) U 1	9-1-63	5.5 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 93 - South of Kalispell) .
	I 15-2 (16) 126 U 1	7-31-64	2.6 miles grading, drainage, aggregate surfacing, concrete paving, plant mix bituminous and seal coat oiling. (U. S. 91 - Butte West) .		F - 191 (21) U 2	9-1-62	7.2 miles seal and cover oiling. (U. S. 93 - South of Kalispell) .
	I 15-2 (16) 126 U 2	9-30-63	Five structures. Two prestressed concrete beam overpasses, One 301 & 321 foot B&P RR & C&ST&P RR. Three steel and concrete overpasses, One 442 & 489 foot - NP RR and Clark Fork. One 244 foot - west Butte Interchange. (U. S. 91 - Butte West) .	132	F - 239 (9) U 2	9-1-62	14.5 miles seal and cover oiling. (U. S. 93 - North of Hamilton) .
	I 15-2 (16) 126 U 3	9-30-63	2.2 miles fencing . (U. S. 91 - Butte West) .	133	F - 235 (27) U 2	9-1-62	9.2 miles seal and cover oiling. (U. S. 87 - Southeast of Belt) .
	I 15-2 (16) 126 U 4	9-30-63	0.4 miles fencing . (U. S. 10 - Butte West) .	134	F - 246 (9) U 2	4-1-62	2.2 miles seal and cover oiling. (U. S. 87 - Southeast of Belt) .
	I 15-2 (16) 126 U 5	9-30-63	Dual 463 foot steel and concrete overpasses - NP RR & C&ST&P RR. (U. S. 91 - Butte West) .	135	F - 103 (10) U 1 & 333 (28) U 1	8-15-62	11.5 miles grading, cement stabilized base, surfacing, drainage, plant mix bituminous and seal coat oiling. Widen 57 & 75 foot treated timber bridges to 36 foot width - Box Elder Creek. (Montana 19 - Boy Northcut) .
6	I 94-1 (5) 51	7-31-63	One 580 foot riveted plate girder bridge - Big Horn River . (U. S. 10 - west of Hysham) .	138	FHP - 42 H *	1962	2.2 miles grading, drainage, aggregate surfacing, and bituminous surface treatment. Widening of 105 foot Reinforced Concrete Girder Bridge - Grayling Creek . (U. S. 191 - North of West Yellowstone) .
	I 94-1 (6) 50 U 1 & 94-2 (4) 51 U 1	7-31-64	5.5 miles grading, drainage, aggregate surfacing, plant mix bituminous surfacing. (U. S. 10 - west of Hysham) .	141	F - 144 (6) U 1	8-15-62	4.7 miles (2.3 miles four lane divided) grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 38 foot treated timber bridge - Goudes Coulees. (U. S. 2 - Glasgow East) .
	I 94-2 (4) 51 U 2	12-31-62	One 178 foot prestressed concrete beam bridge - Underpass - Big Horn Interchange. (U. S. 10 - west of Hysham) .		F - 144 (6) U 2	8-15-62	Installation of traffic signals and lighting. (U. S. 2 - First Avenue North in Glasgow) .
	I 94-1 (6) 50 U 2	11-30-62	1.3 miles fencing . (U. S. 10 - west of Hysham) .	142	F - 156 (10) U 1 & F 156 (11) U 1	9-15-62	13.2 miles grading, drainage, surfacing, plant mix bituminous surfacing. (U. S. 212 - Southeast of Miles City) .
	I 94-2 (4) 51 U 3	8-15-62	4.2 miles fencing . (U. S. 10 - west of Hysham) .				
7	I 90-3 (8) 180 U 3	8-15-62	8.6 miles fencing . (U. S. 10 - west of Bear Lodge) .	144	F - 180 (4) & U 277 (5)	8-15-62	3.2 miles minor grading, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 87 & 89 - In Great Falls) .
	I 15-4 (10) 182	8-15-62	2.8 miles four lane divided, grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. Dual 260 foot steel girder bridge - Underpass - Colonial Club Interchange . (U. S. 91 - Helena - South) .		F - 180 (5)	10-15-62	1.1 miles (four lane divided) median concrete curbing - Second Avenue North. (U. S. 89 - Great Falls East) .
8	I 15-4 (10) 182	8-15-62	2.8 miles signing and delineation . (U. S. 91 - Helena - South) .				
	I 15-4 (10) 182	8-15-62	1.3 miles four lane divided, grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling . (U. S. 91 - In Helena) .				
	I 15-4 (10) 182	8-15-62	One 243 foot steel and concrete bridge - Underpass - Cedar Street Interchange. One 215 foot prestressed concrete beam bridge. Underpass - York Road Separation . (U. S. 91 - In Helena) .	201	S - 6 (4)	8-31-62	7.0 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (North of Townsend) .
	I 15-4 (10) 182	8-15-62	1.3 miles fencing and cattle guards . (U. S. 91 - In Helena) .	202	S - 50 - 272 (2)	8-15-62	1.7 miles aggregate surfacing, plant mix bituminous and seal coat oiling. (Southeast of Frenchtown) .
	I 15-4 (10) 182	8-15-62	1.3 miles signing and delineation . (U. S. 91 - In Helena) .	203	S - 258 (4)	11-12-62	7.8 miles grading, drainage and aggregate surfacing. (Junction Montana 20 East Van Norman South) .
9	I 15-4 (10) 182	8-15-62	One 249 foot steel and concrete bridge - Overpass - NP RR. (U. S. 10 - west of Columbus) .	204	S - 32 (11)	11-12-62	7.4 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling. (Richby Northwest & Southeast) .
	I 15-4 (10) 182	8-15-62	5.9 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. Frontage roads. (U. S. 10 - west of Columbus) .	205	S - 399 (2)	8-15-62	1.0 mile grading, drainage and aggregate surfacing. One 132 foot prestressed concrete beam bridge - Flatwillow Creek. (North of Helena) .
	I 15-4 (10) 182	8-15-62	4.6 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. Frontage roads. (U. S. 10 - west of Columbus) .	206	S - 49 (7) U 1	9-1-62	9.0 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 29 foot - treated timber bridge - North Fork Smith River. (White Sulphur Springs Northwest) .
	I 15-4 (10) 182	8-15-62	Four prestressed concrete beam structures. One 102 foot - Frontage road separation . Dual 133 foot - Reed Point Interchange. One 101 foot - Berry Creek. Two 17 foot and one 21 foot concrete slab junior grade separations. (U. S. 10 - west of Columbus) .	207	S - 7 (6) U 1	8-15-62	6.5 miles (1.3 miles four lane divided) grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (East of Kalispell) .
	I 15-4 (10) 182	8-15-62	5.9 miles fencing. (U. S. 10 - west of Columbus) .	208	FLH - 9 (1) U 1	9-1-62	5.2 miles grading, drainage, plant mix bituminous and seal coat oiling. (St. Xavier Southwest) .
	I 15-4 (10) 182	8-15-62	4.6 miles fencing. (U. S. 10 - west of Columbus) .		FLH - 9 (1) U 2	9-1-62	4.4 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (St. Xavier Southwest) .
10	I 15-4 (10) 182	8-15-62	7.2 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. fencing and weigh station. (U. S. 10 - Between, Wibaux County Line to Wibaux) .	209	FLH - 9 (1) U 3	9-1-62	One 65 foot prestressed concrete beam bridge - Big Horn Irrigation Canal. (St. Xavier Southwest) .
	I 15-4 (10) 182	8-15-62	8.1 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling, fencing and cattle guards. (U. S. 10 - Wibaux to North Dakota State Line) .	210	S - 65 (4) U 2	8-15-62	4.9 miles seal and cover oiling. (Southeast of Big Fork) .
	I 15-4 (10) 182	8-15-62	Three prestressed concrete beam structures. One 163 foot - west Wibaux Interchange, One 286 foot - Beaver Creek, One 173 foot - East Wibaux Interchange, and fencing . (U. S. 10 - At Wibaux) .	211	S - 323 (2)	8-15-62	One 122 foot prestressed concrete beam bridge - Libby Creek . (Southeast of Libby) .
	I 15-4 (10) 182	8-15-62	6.7 miles (1.2 miles four lane divided) grading, drainage, surfacing, plant mix bituminous and seal coat oiling. One concrete slab junior grade separation . (U. S. 10 - North and South of Superior) .	212	S - 290 (12)	7-31-63	5.3 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 708 foot riveted plate girder bridge - Missouri River. (Fort Benton Southeast) .
11	I 90-1 (6) 43 U 1	8-15-62	11.8 miles (11.0 miles four lane divided) grading, drainage, surfacing, plant mix bituminous and seal coat oiling. Construction of irrigation and water supply facilities. (U. S. 10 - west and East of Livingston) .	213	S - 71 (4)	8-31-62	0.5 miles grading, drainage, and aggregate surfacing. One 142 foot prestressed concrete beam bridge - Musselshell River. (Ryegate South) .
12	I 15-4 (10) 182	8-15-62	Ten prestressed concrete beam structures. Dual 113 foot overpasses - West Interchange, One 279 foot Underpass - South Interchange. Dual Junior Grade Separation - Farm Road, Dual 128 foot overpasses, jointly Interchange. One 279 foot Underpass - East Interchange, One 210 foot Underpass - Mission Interchange. (U. S. 10 - west and East of Livingston) .	214	S - 238 (1) U 2	9-15-62	6.8 miles grading, drainage and aggregate surfacing. (Circle South) .
	I 15-4 (10) 182	8-15-62	11.8 miles fencing and cattle guards . (U. S. 10 - west and East of Livingston) .		S - 238 (1) U 1	10-31-62	Three bridges. One 193 foot prestressed concrete beam - Redwater River, two 38 foot treated timber trestles - Hall and McGuns Creeks. (Circle South) .
	I 15-4 (10) 182	8-15-62	11.8 miles signing and delineation. (U. S. 10 - west and East of Livingston) .	215	EFPO - 40 (1) *	1962	3.8 miles grading. (Through Earthquake Slide - Southwest of Ennis) .
	I 15-4 (10) 182	8-15-62	Dual 350 foot steel girder overpass - NP RR. (U. S. 10 - Southeast of Bonner) .	216	S - 366 (6)	12-15-62	4.1 miles grading, drainage and aggregate surfacing. (Sweetgrass West) .
	I 15-4 (10) 182	8-15-62	One 285 foot prestressed concrete beam bridge - Clark Fork . (U. S. 10 - Southeast of Bonner) . On Frontage Road. One 74 foot concrete bridge - B.L.W.A. Canal (U. S. 10 - East of Laurel) . On Frontage Road .	217	S - US 386 (1)	10-15-62	2.6 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Northeast of Great Falls) .
13	I 15-4 (10) 182	8-15-62	Dual 123 foot prestressed concrete beam overpasses - Frontage Road Separation . (U. S. 10 - Southeast of Bonner) .	218	S - 221 (2)	11-1-62	5.2 miles grading, drainage and aggregate surfacing. (Thompson Falls Southwest) .
	I 15-4 (10) 182	8-15-62	5.3 miles four lane divided, grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. Four prestressed concrete beam structures. Dual 113 foot overpasses - Bear Creek Interchange. Dual 128 foot overpasses - Trail Creek Interchange. Dual 335 foot steel and concrete overpasses - NP RR. (U. S. 10 - East of Eureka) .	219	FHP 9 - 1 (1) *	1962	1.5 miles grading, drainage, and selected topping. One 445 foot reinforced concrete girder bridge - Clark Fork. (East of St. Regis) .
	I 15-4 (10) 182	8-15-62	5.3 miles fencing . (U. S. 10 - East of Eureka) .	220	S - 301 (8)	10-15-62	5.0 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Northeast of Havre) .
	I 15-4 (10) 182	8-15-62	5.3 miles signing and delineation . (U. S. 10 - East of Eureka) .	221	S - 399 (1)	9-1-62	7.9 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Helena North) .
14	I 15-4 (10) 182	8-15-62	6.2 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling . (U. S. 10 - East of Foreyth) .	222	S - 259 (2) U 1	11-1-62	9.0 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. One 38 foot treated timber trestle bridge - Sand Creek. (Northwest of Forsyth) .
17	I 15-4 (10) 182	8-15-62	4.9 miles signing and delineation . (U. S. 10 - East of Forsyth) .	223	S - 290 (13) U 1	11-15-62	9.5 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Northwest of Geraldine) .
	I 15-4 (10) 182	8-15-62	12.7 miles (7.7 miles four lane divided) grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. Dual 118 foot prestressed concrete beam overpasses - Jates of the Mountains Interchange. (U. S. 91 - North of Helena) .	224	S - 2 (15) U 1	10-30-63	1.8 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (North of Helena) .
	I 15-4 (10) 182	8-15-62	12.7 miles fencing and cattle guards . (U. S. 91 - North of Helena) .	225	S - 58 (5) U 1	11-30-62	13.0 miles aggregate surfacing, plant mix bituminous and seal coat oiling. (North of Hilger) .
	I 15-4 (10) 182	8-15-62	3.4 miles (2.3 miles four lane divided) grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 91 - North of Helena) .	226	S - 213 (4)	8-15-62	0.9 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (East of Butte) .
	I 15-4 (10) 182	8-15-62	Dual prestressed concrete beam structures. 113 foot - Sisteen Interchange. One 63 foot treated timber bridge - Little Prickly Pear Creek on frontage road. (U. S. 91 - North of Helena) .	227	S - 328 (1)	8-15-62	4.4 miles grading, drainage, aggregate surfacing, road mix bituminous and seal coat oiling. Two prestressed concrete beam bridges. One 173 foot - West Fork Bitterroot River, One 198 foot - East Fork Bitterroot River. (South of Darby) .
18	I 15-4 (10) 182	8-15-62	7.3 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 10 - west of Miles City) .	228	S - 368 (13)	8-15-62	0.6 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Junction U. S. 2 - East of Glasgow - North) .
	I 15-4 (10) 182	8-15-62	One 173 foot prestressed concrete beam bridge - Underpass - Moon Creek Road Interchange. (U. S. 10 - West of Miles City) .		S - 239 (2) U 1	10-30-62	13.4 miles aggregate surfacing, plant mix bituminous and seal coat oiling. (Junction U. S. 2 - East of Glasgow North) .
	I 15-4 (10) 182	8-15-62	7.3 miles fencing. (U. S. 10 - West of Miles City) .		S - 368 (11)	8-15-62	1.4 miles aggregate surfacing, plant mix bituminous and seal coat oiling. (Junction U. S. 2 - East of Glasgow - South) .
	I 15-4 (10) 182	8-15-62	8.6 miles signing and delineation . (U. S. 10 - west of Miles City) .	229	S - 75 (4)	10-15-62	8.4 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling. (East of Roserve) .
<u>FEDERAL AID PRIMARY PROJECTS</u>							
101	FHP 60-A *	1962	8.9 miles grading, drainage, surfacing, and bituminous surface treatment. One 260 foot prestressed concrete girder bridge -	230	S - 12 (9)	10-15-62	4.9 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Marlow North) .
102	F - 279 (6)	9-1-63	0.2 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 10 - In Butte) .	231	S - 52 (1)	10-30-62	5.9 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Northwest of Choteau) .
103	F - 65 (8) U 1	8-15-62	0.5 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 10 - Byfoss - In Butte) .	232	S - 239 (9) U 1	10-30-62	6.5 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (South of Ghoster) .
104	F - 84 (30) U 1	8-15-62	10.9 miles aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 87 - Southeast of Fairfield) .	233	S - 167 (6)	8-15-62	5.0 miles grading, drainage, surfacing and bituminous surface treatment. (Northwest of Herrick) .
105	F - 157 (16) U 2	8-15-62	One 102 foot prestressed concrete beam bridge - Grass Creek. (Montana 22 - Northwest of Miles City) .	234	S - 398 (2)	9-15-63	4.6 miles grading, drainage and aggregate surfacing. (Northwest of Baker) .
	F - 157 (16) U 1	10-31-62	5.0 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Montana 22 - Northwest of Miles City) .	235	S - 9 (19) U 2	9-30-62	8.5 miles seal and cover oiling. (Southeast of Boulder) .
106	F - 315 (15)	11-30-62	12.1 miles grading, drainage, aggregate surfacing. (Montana 24 - Southeast of Fort Peck) .	236	S - 377 (2)	8-15-63	4.0 miles grading, aggregate surfacing, plant mix bituminous and seal coat oiling. (Whitefish North) .
107	F - 214 (3) U 1	8-15-62	1.0 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling. (U. S. 91 - In Helena) .	237	S - 77 (6)	11-30-62	0.6 miles grading, drainage and one 124 foot prestressed concrete beam bridge. - Smith River. (South of Ula) .
	F - 214 (4)	8-15-62	0.7 miles signing and delineation. (U. S. 91 - In Helena) .	238	S - 66 (2) U 2	9-30-62	1.2 miles seal and cover oiling. (Emigrant Southeast) .
	U - 249 (14) U 1 & U - 249 (14) U 2 & U - 249 (14) U 3	8-15-62	0.5 miles four lane divided, grading, aggregate surfacing and Portland Cement concrete paving. One 206 foot prestressed concrete beam overpass - S.N. RR. (U. S. 12 - Byfoss - In Helena) .	239	S - 273 (3) U 2	9-30-62	0.8 miles seal and cover oiling. (Northeast of Emigrant) .
	U - 249 (14) U 3	8-15-62	Traffic controls on Euclid Avenue, Lyndale Avenue, Benton Avenue to East Chance Gulch. (U. S. 12 - Byfoss - In Helena) .	240	S - 291 (6)	8-30-62	5.4 miles grading, cement stabilized base - drainage, plant mix bituminous and seal coat oiling. (Northwest of Avon) .
108	F - 42 (1) U 2	8-31-62	9.3 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (Montana 43 - Wisdom West) .	241	S - 329 (4) U 2	9-1-62	10.3 miles seal and cover oiling. (North of Eden) .
	F - 42 (1) U 1	8-31-62	One 215 foot prestressed concrete beam bridge - Big Hole River. (Montana 43 - Wisdom West) .	242	S - 8 (10) U 2	9-1-62	9.0 miles seal and cover oiling. (West of Scobey) .
109	F - 149 (16)	9-15-63	9.7 miles grading, drainage, aggregate surfacing and plant mix bituminous				



Upper Left—Shows Missoula County Maintenance Forces repairing Lewis and Clark Highway. Upper Right—This is a scene along the completed part of this highway in Idaho. Lower Left—A view along the Lewis and Clark Highway. This portion is in the process of being paved. Lower Right—Just over the divide in Idaho on the Lewis and Clark Highway.

WOMEN AT IT AGAIN

Recently, a group of women of the Lolo community dramatized with dramatic results, the fact that a Montana Highway was sadly in need of repair. They pulled coaster wagons full of gravel onto the highway, set their children to flagging traffic and with a verbal blast at the Highway Department they proceeded to fill some chuck holes.

This highway has been in the limelight this year due to the fact that a huge dedication ceremony is to be held at the Montana-Idaho line, celebrating the opening up of this new route to the coast. A route that has been in the minds of the people of the area for 104 years, and actually the first route used by white men to reach the Pacific in the Northwest.

(Continued on page 10)



CONTRACTORS BUSY ON HIGHWAYS

With \$63,697,167 worth of highway contracts under way, Montana Contractors are currently employing nearly 2,000 men. Work is currently under way on 678 miles of new highway, plus many feet of new structures, stockpiles, fencing, signing and seeding.

Here are some photos taken recently, including two pictures of the Miles City East Section of Interstate 94, where Peter Kiewit Sons are laying

the concrete highway. This operation is a team effort, and before the job commences, skull sessions are held, with each man knowing all the plays. The concrete is layed at about eight feet a minute.

Arkwright's men are shown here at Reed Point, in one picture, working on the Reed Point Interchange, and in the other, Interstate 90 begins to take shape along the south edge of the community, and extends on west.

WOMEN AT IT AGAIN

(Continued from page 9)

In accusing the Montana Highway Department, the women overlooked that this highway is a secondary highway, and as such, is the responsibility of Missoula County to maintain. Missoula county pointed the finger at the Bureau of Public Roads, for the reason that the 32.5 miles of the road in Montana was tentatively scheduled to be let to contract by the Bureau of Public Roads during the winter or early spring, and the county didn't wish to expend large sums of money on filling the chuck holes when the construction work would eliminate them anyhow.

As a result of the publicity that all three agencies got—the county is now fixing the road, the BPR has opened bids on the contract, and the Montana Highway Department is preparing to take over maintenance on the section, once it is rebuilt.

Senator Gore of Tennessee, Governor Babcock, and Governor Smylie will be the featured speakers at the dedication, to be held at Packers Meadows on August 19, and the two Governors will saw a log to signify the opening of this new route, first used by Lewis and Clark, but used by the Indians for centuries prior to the Expedition. Upon completion, it will become an extension of U. S. 12.

NEWS FROM THE DIVISIONS

HELENA

Once in a while in the Scott Hart Building auditorium, the bunch gathers to honor an individual on retirement, but early in July, we gathered to wish a couple of our "kids" well on a new venture. Art Zion and Alice Pavlicek have



decided to team up. They are shown here with Al Griener receiving a clever booklet presented to them by their fellow employees and friends in the building. We wish you much happiness, Alice and Art.

GREAT FALLS

Mr. Ed Strainer, former Sectionman at Helena, has been promoted to Division Maintenance Foreman at Great Falls. Mr. Roy Rule has been appointed as Sectionman to succeed Mr. Strainer at Helena. Congratulations, and much good luck in your new assignments.

Ralph B. Roberts, member of the Traffic Section of the Planning Survey Dept., had the sad misfortune of contracting pneumonia while on an assignment in the Great Falls area. Mr. Roberts is recuperating successfully in the Columbus Hospital in Great Falls. Our sympathy and best wishes for a speedy recovery.

With the completion of the McGregor Bridge, May 25, 1962, another link to aid the North-South flow of traffic in Great Falls has been forged. With one more contract to construct approaches to this bridge coming up in the near future, it will still be some months before traffic can move smoothly between the Havre highway and 10th Ave. South.

Two men who have just retired from Highway service, are: Russell Sherman and Nick Rebarckek. The following are a few statistics about each man.

Russell E. "Rusty" Sherman, when he retired, was one of our Division Maintenance Foremen. Employed June 22, 1931 and retired June 29, 1962.

Nick D. Rebarckek's classification on retirement was oiler. He was employed on August 27, 1943 and retired May 4, 1962. Nick had to retire because of disability.

A cake and coffee party for these two men was held and Rusty was presented with a replica of his pickup and Nick was given a model of his shovel. Both men also received complete fishing outfits.

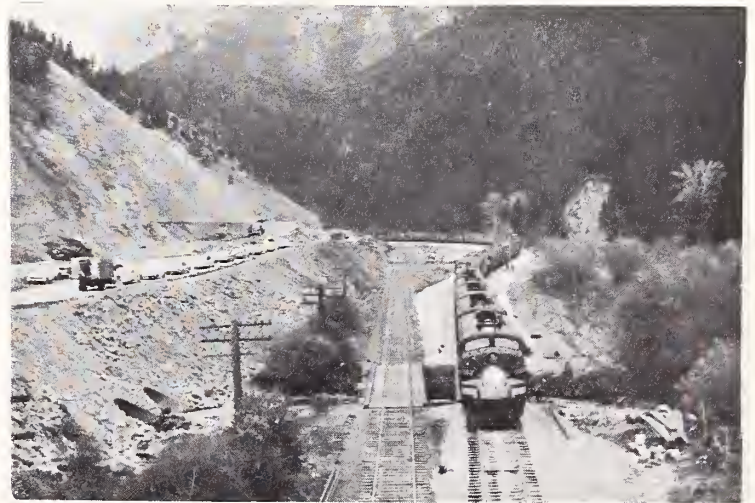
BOZEMAN

Bozeman Division Office Engineer Richard L. Miller and his family have returned from an enjoyable vacation spent in Portland and Seattle.

Rodman Jay B. Randall is attending U. S. Army Reserve Encampment, Yakima Firing Center, Yakima, Washington.

Engineering Aide Edwin E. Howard and Clerk Gunwald Brenden, Jr., have attended Montana National Guard Encampment at Ft. William H. Harrison, Helena, for two weeks.

Stockman Harold W. Roby and his family have returned from their Seattle World's Fair vacation.



The accompanying pictures show the first train over the newly relocated Northern Pacific route in Rocky Canyon. This approximate mile of relocated track was completed Friday, May 25, 1962 with the first train over the line being the west bound Vista-Dome North Coast Limited.

HAVRE

Ray Toldness won the championship flight of the Oilfield Golf Tournament at Shelby on June 17, 1962, with a score of 34 for the 9-hole 36 par course. This is not the first time that Ray has won the tournament nor is it the lowest score that he has turned in. Other years that he has emerged the champion are 1958, 1960 and 1961. Ray's lowest scores for the course is 30, the lowest ever recorded at Shelby.

J. W. Timmons was winner of the fourth flight with a 75 for 18 holes, which is very good for the difficult course. Timmons is Ray's boss during the day, but on the golf course the tables are turned with Ray taking things under command.

Paul M. English, Materials Inspector, developed such an interest in digging, from his work on gravel exploration and soil surveys, that he interested enough people to start the Milk River Archaeological Society. He and most of the members of the local society have now joined the Montana Association of Archaeologists. Paul and his friends worked up a publication of instruction, illustrated by Fred Fredrick, stockman, that is impressive to amateur and professional alike.

Paul attended the State Archaeological meeting at Livingston this year and was elected a director and president-elect of the State Society.

With men like these who spend all of their spare time working up the story of time long past we may find out much that would otherwise be lost along the march of progress.



GLENDIVE

District Right-of-Way Office in Glendive has recently added a new employee to their roster, by the name of John F. Schrader who hails from Great Falls, Montana. He is to be a right-of-way agent in the field and started working on June 16, 1962. Welcome to the family, John.

Kenneth Cress, Right-of-Way agent, and wife Grace, are the proud parents of a little girl named Nancy Susan who was born on June 4, 1962, and weighed in at 8 lbs. 3 oz. Congratulations.

William J. Hauck, District R/W Supervisor and Dean Knapp, R/W agent, are attending Reserve Camp activities in Yakima, Washington, being held on the proving grounds in that area. They also plan to visit the World's Fair Displays if at all possible. They will be gone from June 17, 1962 to July 2, 1962.

Darrell V. Hoover, stockman, attended the National Guard Camp, held in Helena and Deer Lodge areas. He was gone from June 11, 1962, to June 25, 1962. While he was busy with maneuvers and guard activities, his daughter took her first look at our world on June 12, 1962, weighing in at a mere 5 lbs. 11 oz. They have named their bundle of joy Julie Ann. Congratulations.

Dick Chrest, draftsman for the District Right-of-Way office, attended a week's schooling and advice on deed writing in Helena and is back raring to show all the knowledge he has achieved.

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